

REMARKS

The above-identified application is United States application serial number 10/759,849 filed on January 15, 2004. Claims 1-28 are pending in the application. Claims 20-27 are withdrawn from consideration. Claims 1-19 and 28 are rejected.

Election / Restriction

Applicants elect to prosecute Group I, Claims 1-19 and 28 drawn to an airflow distribution control system, classified in class 454, subclass 184. Applicants cancel withdrawn Claims 20-27.

Rejection of Claims under 35 U.S.C. §103

Claims 1-19 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's information disclosure statement entry (IQ) in view of May (3,318,225). Applicants traverse some aspects of the rejections and have amended Claims 1, 5, 8, 9, 11, 14, 15, 16, 17, and 28 to clarify distinctions between the cited art and the claims.

Claims 1- 7 distinguish over the cited references at least on the basis that the references do not disclose "an adaptively controllable flow resistance" or "a sensor . . . that . . . dynamically controls the flow resistance . . . to balance air flow distribution to match thermal loads imposed by data center equipment." Neither cited reference discloses "an adaptively controllable flow resistance" in a partition. The IQ reference discloses "resistance of a thin partition can be controlled precisely by varying its open area" (P. 3, col. 1, lines 1-2). This statement does not describe a partition with an adaptively controllable flow resistance as claimed by the applicants but rather, with respect to the totality of the disclosure, describes that a particular partition has a resistance that depends on the size of the open area in the partition. This clarification is shown elsewhere in columns 1 and 2 of page 3 as follows: "flow rates . . . can be reduced by increasing the flow resistance . . . by installing perforated tiles with less open area"; "flow rates . . . can be increased by placing perforated tiles with larger open areas"; and "using perforated partitions with appropriate open areas and placing them at appropriate locations." May does not disclose usage of a sensor to adaptively control "an adaptively controllable flow resistance" in an under floor

partition but rather describes a sensor used to operate a damper that selects between a hot air duct and a cold air duct.

Claim 2 further distinguishes over the cited references because the combined references do not disclose "adjustable apertures in the under-floor partition." The IQ reference teaches partitions with a particular size of open areas with the partitions placed in locations based on desired flow resistance. The open area disclosed by IQ is not adjustable. The partition disclosed by May does not have apertures.

Claim 3 further distinguishes over the cited references because the combined references do not disclose louvered shutters in the partition. Synergistic results attained by the claimed configuration are exemplified in the specification, such as in paragraph [0041]. These results are not necessary for novelty or nonobviousness over the cited references. These results are neither sought nor attained by the cited references. Furthermore, the open area disclosed by IQ is not adjustable. The partition disclosed by May does not have apertures.

Claim 4 further distinguishes over the cited references because the combined references do not disclose "a plurality of under-floor partitions with controllable flow resistances . . . independently controllable by the sensor."

Claim 5 further distinguishes over the cited references because the combined references do not disclose a "controller adapted to determine a spatial distribution of at least one parameter sensed by the sensor network and control flow resistances in the plurality of partitions mutually independently." Synergistic results attained by the claimed configuration are exemplified in the specification, such as in paragraphs [0049]-[0052]. These results are not necessary for novelty or nonobviousness over the cited references. These results are neither sought nor attained by the cited references.

Claims 8-10 distinguish over the cited references at least on the basis that the references do not disclose either "a plurality of adjustable apertures in the partition adapted for dynamic control of airflow resistance under the raised-floor" or "a servomotor . . . adapted to dynamically control flow resistance of the partition to adjust air flow distribution under the raised-floor."

Claim 9 further distinguishes over the cited references because the combined references do not disclose either "louvered shutters in the partition" or "a controller . . . adapted to control the louvered shutters to adjust air flow distribution under the raised-floor." Synergistic results attained by the claimed configuration are exemplified in the specification, such as in paragraph [0041]. These results are not necessary for novelty or nonobviousness over the cited references. These results are neither sought nor attained by the cited references.

Claims 11-19 distinguish over the cited references at least on the basis that the references do not disclose "at least one under-floor partition with a controllable flow resistance" or "at least one sensor . . . that . . . dynamically control the flow resistance beneath the raised-floor . . . to balance air flow distribution to match thermal loads imposed by data center equipment."

Claim 14 further distinguishes over the cited references because the combined references do not disclose "a plurality of under-floor partitions . . . [that] have flow resistance that is dynamically controllable independently of other partitions." Synergistic results attained by the claimed configuration are exemplified in the specification, such as in paragraphs [0049]-[0052]. These results are not necessary for novelty or nonobviousness over the cited references. These results are neither sought nor attained by the cited references.

Claim 15 further distinguishes over the cited references because the combined references do not disclose "a plurality of adjustable apertures in . . . at least one under-floor partition" or "a servomotor . . . responsive to communication from the sensor to dynamically control flow resistance beneath the raised floor."

Claim 16 further distinguishes over the cited references because the combined references do not disclose either a "louvered shutters in . . . at least one under-floor partition" or "a servomotor . . . responsive to communication from the sensor to control flow resistance beneath the raised floor."

Claim 17 further distinguishes over the cited references because the combined references do not disclose either "partitions with controllable flow resistances" or "a network of distributed sensors . . . capable of dynamically controlling the plurality of partitions mutually independently." Synergistic results attained by the claimed configuration are

exemplified in the specification, such as in paragraphs [0049]-[0052]. These results are not necessary for novelty or nonobviousness over the cited references. These results are neither sought nor attained by the cited references.

Claim 28 distinguishes over the cited references at least on the basis that the references do not disclose "means for dynamically adjusting flow resistance distribution in a plenum under the raised floor based on the sensed parameter to balance air flow distribution to match thermal loads imposed by data center equipment."

New Claims

Applicants add new Claims 29-36 that cover additional aspects originally disclosed in the specification so that no new matter is added.

CONCLUSION

The application, including remaining Claims 1-19 and 28-36, are believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the examiner is requested to telephone the undersigned at (949) 251-0250.

I hereby certify that this correspondence is being facsimile transmitted to the USPTO, Central Number at (371) 273-8300 on the date shown below:

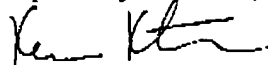
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Jay C. Ngo

(Printed Name of Person Signing Certificate)

November 9, 2005
(Date)

Respectfully submitted,



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